



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/883,854	06/18/2001	Melvin A. Park	140-058	3090

7590 08/26/2003  
Ward & Olivo  
708 Third Avenue  
New York, NY 10017

EXAMINER

WELLS, NIKITA

ART UNIT	PAPER NUMBER
----------	--------------

2881

DATE MAILED: 08/26/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/883,854

Applicant(s)

PARK, MELVIN A.

Examiner

Nikita Wells

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 18 June 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

2. Claims 1-2, 5-14, 17-24, and 29-36 are rejected under 35 U.S.C. 102(e) as being anticipated by Park et al. (6,410,914 B1)

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

With respect to claims 1, 2, 5, 6, 13, 14, 17, 18, 25, 29, and 30, Park et al. disclose (Abstract; Figs. 1 and 7; Col. 2, lines 7-12 and lines 35-50; Col. 4, lines 22-42; Col. 5, lines 30-39; Col. 6, lines 16-36; Col. 7, lines 16-26; and Col. 9, lines 45-67) an apparatus for automating an atmospheric pressure ionization source for a mass spectrometer, wherein the apparatus comprises: a source mounting; a robot; an atmospheric pressure ionization (API) source device; a mass analyzer; and a capillary having an inlet end and an outlet end; wherein the inlet end of the capillary is positioned by the robot for accepting ions from the API source (Col. 9, lines 45-67),

Art Unit: 2881

and wherein the outlet end of the capillary is positioned such that the ions are introduced into the mass analyzer. Park et al. also disclose that the capillary comprises a channel traversing straight through the capillary and the inlet end and outlet end of the capillary comprise conductive end caps (Col. 7, lines 16-26).

With respect to claims 7-11, 19-23, and 31-35, Park et al. disclose (Abstract; Col. 2, lines 7-12 and lines 35-50; Col. 4, lines 22-42) an API source device, wherein the API source device is selected from the group consisting of electrospray ionization (ESI) source, matrix-assisted laser desorption/ ionization (MALDI) source and chemical ionization (CI) source, wherein the ESI source is a pneumatically assisted electrosprayer, a nanoelectrosprayer, wherein the apparatus comprises at least one ESI source and at least one CI source (Col. 1, lines 40-44; Col. 2, lines 7-12 and lines 35-50; Col. 4, lines 22-42).

With respect to claims 12, 24, and 36, Park et al. disclose (Col. 1, lines 25-39) an atmospheric pressure ionization source apparatus, wherein the mass analyzer is selected from the group consisting of a time-of flight mass analyzer, a quadrupole mass analyzer, a quadrupole ion trap mass analyzer, and a ion cyclotron resonance mass analyzer.

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3-4, 15-16, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Park et al. (6,410,914 B1) in view of Andresen et al. (4,391,778).

Art Unit: 2881

With respect to claims 3-4, 15-16, and 26, although Park et al. disclose an atmospheric pressure ionization source apparatus, Park et al. fail to disclose that the capillary comprises a channel having a helical or sinusoidal structure. However, Andresen et al. disclose (Figs. 1 and 2; and Col. 3, lines 34-42) an apparatus for analysis of materials where the capillary comprises a channel having a helical or sinusoidal structure.

With respect to claims 25, 27, and 28, although Park et al. disclose an atmospheric pressure ionization source apparatus, Park et al. fail to disclose that a union having first and second openings wherein the outlet end of the first capillary section is removably positioned within the first opening of the union, and wherein the inlet of the second capillary section is removably positioned within the second opening of the union. However, Andresen et al. disclose (Figs. 1 and Col. 4, lines 16-22) an apparatus for analysis of materials which utilizes a union (adaptor 20) having first and second openings wherein the outlet end of the first capillary section is removably positioned within the first opening of the union.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to recognize and substitute the apparatus for analysis of materials of Andresen et al. into the atmospheric pressure ionization source apparatus of Park et al. in order to obtain a simple, fast, efficient, and reliable means for integrating a robot with various ionization sources and techniques.

#### *Miscellaneous*

5. The signature of the inventor is missing from the "Power of Attorney" form. Please send in a new copy of the form with the appropriate inventor's signature.


Art Unit: 2881

*Conclusion*

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. G. Baykut (6,515,280 B1) discloses a MALDI type ion source with a capacity of exposing the sample to a local gas pulse exactly at the point where the laser desorption process occurs. Bertsch et al. (6,359,275 B1) discloses a high pressure ion source with a conduit for conducting ions to a mass analyzer

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nikita Wells whose telephone number is (703) 305-0416. The examiner can normally be reached 8:30 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on (703) 308-4116. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Nikita Wells

Examiner, Art Unit 2881

August 5, 2003